

**TRIMERIZATION OF ETHYLENE**

**Patent number:** JP9020692  
**Publication date:** 1997-01-21  
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**Classification:**  
**- international:** C07C11/107; B01J31/22; C07C2/26; C08F10/00;  
C07B61/00  
**- european:**  
**Application number:** JP19950170947 19950706  
**Priority number(s):** JP19950170947 19950706

**Abstract of JP9020692**

**PROBLEM TO BE SOLVED:** To selectively and efficiently obtain highly purified 1-hexene from ethylene by using a catalyst composed of a reaction product of a chromium salt with a metallic amide, an inorganic oxide solid, alumoxane and an electron donor compound. **SOLUTION:** Ethylene is trimerized by using a catalyst composed of (A) a reaction product of chromium salt (preferably chromous chloride or chromic chloride) with a metallic amide [preferably a bis(trialkyl)amide salt, etc., such as lithium diisopropylamide], (B) an inorganic oxide solid (e.g.; silica), (C) an alumoxane (preferably an alkylalumoxane such as isbutylalumoxane) and (D) an electron donor compound (e.g.; dimethoxymethane). The component A is preferably obtained by reacting a chromium salt with a metallic amide in a ratio of (1:3) of the former to the latter in a solvent such as tetrahydrofuran at -20 deg.C to 40 deg.C for 1-5hrs. Water is preferably removed prior to the use of component B. A trimerizing temperature of ethylene is preferably 0-150 deg.C.

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